

CONCERNING MEXICAN GERRIDÆ (HEMIPTERA)

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This paper contains the description of two new species of the genus *Gerris* Fabr. and notes on two other species of Gerrids and five species of Halobatinids. All specimens, save those of *G. firma*, n. sp., were collected by R. L. Usinger and the types are deposited in the California Academy of Sciences.

Gerris ampla D. & H., n. sp.

Very large, robust, brownish black, densely clothed with very short golden pile. Antennæ brown, the apical portion of II, all of III and IV brownish black; segment I distinctly longer than II and III conjoined, the apical three subequal in length. Pronotum impressed along the median line in front; there with a short, flavous, longitudinal stripe; the posterior lobe with a rather distinct median carina.

Male: Last abdominal segment above concavely emarginate, the connexiva terminating in very short stout spines. Apical segment of venter not quite as long as two preceding, distinctly impressed in front; hind margin strongly raised, doubly emarginate; first emargination broad, the second wide and very deep with edge clothed with fine pale hairs. First genital segment with a prominent longitudinal keel.

Female: Similar in color to male. Terminal connexival spine shorter and much stouter than in *remigis*.

Length, 17.00 mm.; width, 4.00 mm.

Holotype, apterous male, No. 4569, C.A.S. Ent.; allotype, apterous female, No. 4570, C.A.S. Ent.; and nineteen paratypes, apterous and winged, Real de Arriba, Temascaltepec, Mexico, May 25 and June 7, 1935.

In the winged form the pronotum is more tumid than in the apterous and the veins of hemelytra are very prominent.

The short connexival spines and the very differently formed terminal ventral segment of male, together with the large size and long first antennal segment, separate the species at once from its nearest ally, *G. remigis* Say.

Gerris firma D. & H., n. sp.

Short, moderately robust. Segment I of antennæ slightly shorter than II and III conjoined; III equal to II; IV one-third longer than II. Pronotum long, covering metanotum, black, clothed with very short golden hairs, without longitudinal stripes

on the sides in front, the anterior lobe with a median yellowish brown stripe. Sides of thorax with a silvery sheen. Connexiva margined with yellowish brown, not produced behind.

Male: Anterior femora short, stout, unarmed, not curved. Venter fuscous black, with a median yellowish stripe; last segment nearly as long as the preceding two, impressed behind and broadly margined with yellow, the second notch deep and very wide. First genital beneath deeply transversely impressed on the sides, with a short median ridge, roundly produced behind at the middle; above long, black, margined with brown. Omphalium not prominent.

Length, 5.30 mm.; width, 1.50 mm.

Female: Connexiva very broad, margined with brown, the apex with a few long hairs, truncate, not produced.

Length, 7.00 mm.; width, 2.00 mm.

Holotype, male; allotype, female; and paratypes, male and female; all apterous, Mexico City, Mexico, April, 1910, collection of authors.

This species in some respects seems intermediate between the genera *Gerris* Fabr. and *Limnogonus* Stal. In the front legs the first tarsal segment is noticeably shorter than the second, but the body is only feebly shiny and the body clothing and genital characters are typically *Gerris* in nature.

GERRIS FLAVOLINEATUS Champion

1898. *Gerris flavolineatus* Champion, Biol. Centr.-Amer., Rhynch. II:149, Pl. IX, Figs. 13-15.

1934. *Gerris flavolineatus* Drake and Harris, Ann. Carnegie Mus., XXIII:197, Pl. XXIV, Fig. c.

Tejupilco, Temascaltepec, Mexico, June 18 and 24, 1933; Real de Arriba, Temascaltepec, June 7, 1933; North of Cartago, Costa Rica, July 11, 1932, B. S. Kaiser.

TENAGOGONUS QUADRILINEATUS (Champ.)

1898. *Limnometra quadrilineata* Champion, Biol. Centr.-Amer., Rhynch. II:151, Pl. IX, Fig. 17.

1934. *Tenagogonus quadrilineatus* Drake and Harris, Ann. Carnegie Mus., XXIII:216, Pl. XXIV, Fig. g.

Tejupilco, Temascaltepec, June 16, 1933.

POTAMOBATES THOMASI Hungerford

1937. *Potamobates thomasi* Hungerford, Jl. Kans. Ent. Soc., X:63.

1937. *Potamobates thomasi* Hungerford, Bull. Brooklyn Ent. Soc., XXXII:146, Pl. II.

Three examples, Tejupilco, Temascaltepec, June 16, 1933.

METROBATES PORCUS Anderson

1932. *Metrobates porcus* Anderson, Jl. Kan. Ent. Soc., V:59.

1932. *Metrobates spissus* Drake and Harris, Ann. Carnegie Mus., XXI:88, Pl. II, Figs. 1, 2d, 4d.

1932. *Metrobates porcus* Anderson, U. of Kan., Sci. Bull., XX:308, Pl. XXV, Fig. 3.

Several specimens, some alate, Bejucos, Temascaltepec, July 3, 1933.

These individuals vary from the types of *M. spissus* in that the mesonotum is more obliquely narrowed anteriorly and less abruptly rounded at the front angles. In *spissus* the sides of the mesonotum are practically parallel for their entire length.

METROBATES DENTICORNIS (Champion)

1898. *Trepobatopsis denticornis* Champion, Biol. Centr.-Amer., Rynch., II:158, Pl. IX, Fig. 26.

1932. *Metrobates denticornis* Drake and Harris, Ann. Carnegie Mus., XXI:87, Pl. II, Figs. 2b, 3, 4b.

Several apterous and macropterous males and females, Bejucos, Temascaltepec, July 3, 1933.

TREPOBATES TREPIDUS D. & H.

1928. *Trepobates trepidus* Drake and Harris, Proc. Biol. Soc. Wash., 41:27.

1932. *Trepobates trepidus* Drake and Harris, Bull. Brooklyn Ent. Soc., XXVII:117, Pl. XII, Figs. 8 & 9.

A long series of winged males and females, Tejupilco, Temascaltepec, June 15 to 18, 1933.

TREPOBATES BECKI D. & H.

1932. *Trepobates becki* Drake and Harris, Bull. Brooklyn Ent. Soc., XXVII:120, Pl. XII, Figs. 3 & 7.

One apterous male, Real de Arriba, Temascaltepec, July 7, 1933; several females and one male., Tejupilco, Temascaltepec, June 16, 1933. The legs seem to be constantly shorter in this species than in *T. trepidus* D. & H.